



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/782.865

02/23/2004

Takeshi Oono

Q79595

7079

23373

7590

08/29/2006

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

WOOD, KEVIN S

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,865

Applicant(s)

OONO ET AL.

Examiner

Kevin S. Wood

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 13 is/are pending in the application.
4a) Of the above claim(s) 7-12 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 and 13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119


- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____



2ND NON-FINAL REJECTION

Response to Amendment

1. This action is responsive to the Amendment filed on 12 June 2006. Claims 7-12 have been previously withdrawn. New claim 13 has been added. Claims 1-6 and 13 are pending in the application.

Response to Arguments

2. Applicant's arguments filed 12 June 2006 have been fully considered but they are not persuasive. The examiner has thoroughly reviewed the applicant's arguments but firmly believes the cited reference(s) to reasonably and properly meet the limitations of the claimed invention. The applicant's primary argument is that the McFarland et al. reference (US. Patent No. 6,960,031) does not disclose all the limitations of the invention of claim 1. The applicant argues that the McFarland et al. reference does not a guide member fitted in a second recess and having a protruded portion protruding from the front surface of the substrate and it fittingly engageable in an alignment hole of the optical component. The examiner respectfully disagrees with the applicant's argument. The McFarland et al. reference discloses a substrate (120) having a front surface and a first recess (116) having an open end at least at the front surface; a second recess formed portion (124) disposed in the first recess (116) and having a second recess (124) smaller in diameter than the first recess and having an open end at least at a side corresponding to the front surface, the second recess formed portion

Art Unit: 2874

being made of a material having a machinability better than a material forming the substrate; and an alignment guide member (612) fitted in the second recess and having a protruded portion protruding from the front surface of the substrate and fittingly within alignment holes of the optical component (105). See Fig. 6-9 of the McFarland et al. reference.

The applicant also argues that the McFarland et al. reference does not disclose that the second recess is made out of a material having a better machinability than the substrate. The examiner respectfully disagrees with this argument. The McFarland et al. reference discloses the second recess (124) may be made out of stainless steel, while disclosing that the first recess (116) is made of some sort of encapsulant. The examiner believes stainless steel to be more machinable than the encapsulant.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,960,031 to McFarland et al.

Art Unit: 2874

5. Referring to claim 1, the McFarland et al. reference discloses a substrate assembly for supporting an optical component an optical transmission function, comprising: a substrate (120) having a front surface and a first recess (116) having an open end at least at the front surface; a second recess formed portion (124) disposed in the first recess (116) and having a second recess (124) smaller in diameter than the first recess and having an open end at least at a side corresponding to the front surface, the second recess formed portion being made of a material having a machinability better than a material forming the substrate; and an alignment guide member (612) fitted in the second recess and having a protruded portion protruding from the front surface of the substrate and fittingly engageable in an alignment hole of the optical component (112). See Fig. 1-9 of the reference along with. The optical component (105) and the substrate (120) are integrated so that when the alignment pins engage the substrate they also engage the optical component.

Referring to claim 2, the McFarland et al. reference discloses that the second recess (124) is a high precision. It is inherent that the sleeve (124) would be machined in some manner. See Fig. 1-9 of the reference along with.

Referring to claim 4, the McFarland et al. reference discloses the substrate (120) has a positioning reference portion that serves as a reference for positioning of an optical component (502) and for forming the second recess (124). See Fig. 1-9 of the reference along with. See Fig. 1-9 of the reference along with. It is inherent that when forming the recesses and aligning the optical components, a portion of the substrate (120) is used as a reference point.

Referring to claim 5, the McFarland et al. reference discloses the second recess (124) serves as a reference for positioning of an optical device (104). See Fig. 1-9 of the reference along with. See Fig. 1-9 of the reference along with.

Referring to claim 6, the McFarland et al. reference discloses the substrate comprises two first recesses (116,118) each having the second recess (124,126) formed portion formed with the second recess and a positioning reference portion disposed between the second recesses so as to serve as a reference for positioning of the second recess. See Fig. 1-9 of the reference along with. See Fig. 1-9 of the reference along with. It is inherent that when forming the recesses and aligning the optical components, a portion of the substrate (120) is used as a reference point.

Claim Rejections - 35 USC § 103

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3 and 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,960,031 to McFarland et al.

Referring to claim 3, the McFarland et al. reference discloses the substrate (120) may be made from a ceramic however it does not appear to specifically disclose that the second recess (124) is formed from an inorganic material. The application does not disclose the criticality of the recess being formed from an inorganic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a non-organic metal or metal alloy to form the second recess (124), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. In re Leshin, 125 USPQ 416. The McFarland et al. reference disclosed that the second recess sleeve (124) may be formed from a conductive material. Non-organic metals and metal alloys would be suitable for use as the alignment sleeves and would provide the desired conductive properties.

Referring to claim 13, the McFarland et al. reference discloses the second recess (124 or 126) may be formed from any suitable material. The specification does not disclose the criticality of the recess being formed from a resin. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a resin to form the second recess (124), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. In re Leshin, 125 USPQ 416.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S. Wood whose telephone number is (571) 272-2364. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kevin S. Wood
Patent Examiner